



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMERCIAL CENTER FOR PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/901,632	07/11/2001	Darrell T. McKenzie	DANA-140	7898
23599	7590	10/17/2002	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			CECIL TERRY K	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 10/17/2002

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The patent term adjustment to date is 36 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 36 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (<http://pair.uspto.gov>)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.

**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,632	07-11-2001	Darrell T. McKenzie	DANA-140	7898

23599 7590 10/17/2002

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
2200 CLARENDON BLVD.
SUITE 1400
ARLINGTON, VA 22201
UNITED STATES

EXAMINER

CECIL, TERRY K

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 10/17/2002

Notice of Possible Fee Increase on October 1, 2002

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2002, then the amount due may be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there may be an increase in fees effective on October 1, 2002. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Notice of Proposed Rulemaking, 67 Fed. Reg. 30634, 30636 (May 7, 2002). Although a change to the amount of the publication fee is not currently proposed for October 2002, if the issue fee or publication fee is to be paid on or after October 1, 2002, applicant should check the USPTO web site for the current fees before submitting the payment. The USPTO Internet address for the fee schedule is: <http://www.uspto.gov/main/howtofees.htm>.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of any fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after October 1, 2002 (or mailed with a certificate of mailing on or after October 1, 2002), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Notice of Allowability

Application No.

09/901,632

Examiner

Mr. Terry K. Cecil

Applicant(s)

MCKENZIE, DARRELL T.

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308

1. ☒ This communication is responsive to the IDS and telephonic interview of Paper nos. 2 and 3.
2. ☒ The allowed claim(s) is/are 1-12 which remain as numbered upon allowance.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received _____
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☒ hereto or 2) ☐ to Paper No. _____
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>3</u> |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>2</u> | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23599 7590 10/17/2002

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
2200 CLARENDON BLVD.
SUITE 1400
ARLINGTON, VA 22201

EXAMINER

CECIL, TERRY K

ART UNIT

CLASS-SUBCLASS

1723

210-136000

DATE MAILED: 10/17/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901.632	07/11/2001	Darrell T. McKenzie	DANA-140	7898

TITLE OF INVENTION: COMBINATION VALVE SUPPORT AND SEALING ELEMENT FOR FILTER CARTRIDGES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280	\$0	\$1280	01/17/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status.
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Box ISSUE FEE
Commissioner for Patents
Washington, D.C. 20231
Fax (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

23599

7590

10/17/2002

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
 2200 CLARENDON BLVD.
 SUITE 1400
 ARLINGTON, VA 22201

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901.632	07/11/2001	Darrell T. McKenzie	DANA-140	7898

TITLE OF INVENTION: COMBINATION VALVE SUPPORT AND SEALING ELEMENT FOR FILTER CARTRIDGES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280	\$0	\$1280	01/17/2003

EXAMINER	ART UNIT	CLASS-SUBCLASS
CECIL, TERRY K	1723	210-136000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
 2 _____
 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

☐ Issue Fee

☐ Publication Fee

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

☐ A check in the amount of the fee(s) is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

(Date)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant, a registered attorney or agent, or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMIT THIS FORM WITH FEE(S)

Note: Claims 1-12 are allowed and remain as numbered upon allowance.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with John R. Moses on 10-8-2002.

2. The application has been amended as follows:

- Claim 1 has been replaced with the following:

—1. A combination valve support and sealing element for use in a filter cartridge wherein the filter cartridge includes an annular filter element having a hollow core and an end cap and is disposed in a housing closed by an end plate having a central opening surrounded by an array of radial openings spaced a fixed radial distance from ~~[one another]~~ a central axis defined by the central opening and wherein the radial openings are also spaced equidistant from one another, the combination valve support and sealing element comprising:

a molded unitary body of flexible resilient material;

the unitary body having a central opening coaxial with the end plate central opening and of a constant diameter, ~~[which central opening is coaxial with the central opening of the end plate,]~~ the diameter of the unitary body central opening being greater than the diameter of the

Art Unit: 1723

end plate central opening and less than [radial distances between] the diameter of the area circumscribed by the array of radial openings;

the unitary body having a first annular section which projects into the hollow core of the filter element for sealing with the filter element and a second annular section axially coextensive with the first annular section to form the unitary body central opening, the first annular section having [a] an annular sealing ring thereon for sealing with the end cap and, the second annular section sealing only with the end plate around the central opening [~~through the end plate~~] thereof;

the unitary body having [a] an annular radially projecting flange which is axially spaced from an end of the second annular section and projects radially beyond the [~~space~~] radial openings in the end plate for sealing around the [~~space~~] radial openings to provide an anti-drainback valve; [,] and

a plurality of radially extending ribs on the annular radially [~~extending~~] projecting flange, the radially extending ribs having rib portions projecting axially [~~on~~] along the first annular section of the unitary body and being axially spaced from the annular sealing ring [~~on the first section of the body member~~], which annular sealing ring deflects radially inwardly when the filter element is clogged in order to provide a bypass for fluid when fluid is unable to flow through the filter element.—;

- Claim 3, line 2, “an” has been replaced with —the— and in line 3, “oil” has been replaced with —fluid—;

Art Unit: 1723

- Claim 7 has been replaced with the following:

7. A valve support and sealing element in combination with a filter cartridge in which the filter cartridge includes an annular filter element having a hollow core and an end cap and is disposed in a housing closed by an end plate having a central opening surrounded by an array of radial openings spaced a fixed radial distance from ~~[one another]~~ a central axis defined by the central opening and wherein the radial openings are also spaced equidistant from one another, the combination valve support and sealing element comprising:

a molded unitary body of flexible resilient material;

the unitary body having a central opening coaxial with the end plate central opening and of a constant diameter, ~~[which central opening is coaxial with the central opening of the end plate,]~~ the diameter of the unitary body central opening being greater than the diameter of the end plate central opening and less than ~~[radial distances between]~~ the diameter of the area circumscribed by the array of radial openings;

the unitary body having a first annular section which projects into the hollow core of the filter element for sealing with the filter element and a second annular section axially coextensive with the first annular section to form the unitary body central opening, the first annular section having [a] an annular sealing ring thereon for sealing with the end cap and, the second annular section sealing only with the end plate around the central opening ~~[through the end plate]~~ thereof;

the unitary body having [a] an annular radially projecting flange which is axially spaced from an end of the second annular section and projects radially beyond the ~~[spaced]~~ radial

openings in the end plate for sealing around the ~~[space]~~ radial openings to provide an anti-drainback valve; [,] and

a plurality of radially extending ribs on the annular radially ~~[extending]~~ projecting flange, the radially extending ribs having rib portions projecting axially ~~[on]~~ along the first annular section of the unitary body and being axially spaced from the annular sealing ring ~~[on the first section of the body member]~~, which annular sealing ring deflects radially inwardly when the filter element is clogged in order to provide a bypass for oil when oil is unable to flow through the filter element.—;

- Claim 9, line 4, before “the” (second occurrence), —a flange of— has been added; and in line 5, “flange” has been deleted; and
- The ABSTRACT has been replaced with the following on a separate sheet in the specification:

—A valve support and sealing element **23** for use with a filter cartridge is in the form of a molded unitary body (figure 2). The body includes

- (i) a first annular section **30** projecting into the filter hollow core **13** and having a sealing ring **33** for sealing with the end cap **53**;
- (ii) a second annular section **34** sealing with the end plate **17** at interface **35**; and
- (iii) a flange **38** radially projecting from the second section **34** to cover the inlet openings **19** to act as an anti-drainback valve.

Art Unit: 1723

The flange **38** includes radial ribs **42** that also extend axially on the first section **30** but are spaced from the sealing ring **33**. In operation, upon clogging of the media **14**, oil flows between the ribs **42** and the sealing ring **33** is deflected radially inwardly to provide a bypass for the oil.—

Required Drawing Changes

3. The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

- reference no. "24" will be removed from figure 1 since such is not found in the specification;
- reference no. "46" on the left side of figure 2, will be changed to 42 since the leader thereof indicates the ribs and reference no. "42", also on the left side of figure 2, will be changed to "44" since the leader thereof indicates the axial portion of the rib (as described on page 5 of the specification).

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

- The closest cited art—Palmai (U.S. 3,669,144)—fails to anticipate or render obvious, alone or in any proper combination, the plurality of radially extending ribs on the annular radially projecting flange that includes a rib portion that axially extends along the first annular section but is spaced from the annular sealing ring such that the annular sealing

Art Unit: 1723

5. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (703)305-0079 for any inquiries concerning this communication or earlier communications from the examiner.

Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:00a to 4:30p, on at least four days during the week M-F.
- The group receptionist can be reached at (703)308-0661 for inquiries of a general nature or those relating to the status of this or proceeding applications.
- Wanda Walker, the examiner's supervisor, can be reached at (703)308-0457 if attempts to reach the examiner are unsuccessful.
- Fax numbers for this art unit are as follows:
 - i. (703)872-9310 for *official* faxes (i.e. faxes to be entered as part of the file history) that are not after-final; and
 - ii. (703)872-9311 if after-final.

TKC
October 16, 2002

Joseph W. Drodge
JOSEPH W. DRODGE
PRIMARY EXAMINER



Creation date: 10-03-2003
Indexing Officer: FNIGATU - FITSUM NIGATU
Team: OIPEBackFileIndexing
Dossier: 09901632

Legal Date: 04-18-2003

No.	Doccode	Number of pages
1	LET.	2
2	LET.	1
3	PET.	2
4	IDS	4
5	A...	2
6	CLM	2
7	REM	1

Total number of pages: 14

Remarks:

Order of re-scan issued on